

Appl. No. 10/065,036
Amdt. Dated December 21, 2004
Reply to Office action of September 21, 2004

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REMARKS/ARGUMENTS

This amendment is being submitted in response to the Office Action dated September 21, 2004. In the Office Action, the drawings were objected to by the official Draftsperson under 37 CFR 1.84. Applicants respectfully submit that the figures have been corrected to overcome the errors pointed out by the Draftsperson. Applicant thanks the Draftsperson for the same.

In the Office Action, claims 9-15, 17-26 and 32-39 were rejected under 35 USC §103 (a) as being unpatentable over Brittain et al. (US patent application publication 2002/0140423) in view of Pelc et al. (US Patent 6,445,181). Claims 9-15, 17-26 and 32-39 were also rejected under 35 USC §103 (a) as being unpatentable over Hajnal et al. (US patent 6,385,478) in view of Pelc et al. (US Patent 6,445,181). In this amendment, claim 9 has been amended. No new matter has been added. Claims 1-6, 8 and 27-31 have been withdrawn. Claims 9-15, 17-26 and 32-39 remain pending in this application. Reconsideration in view of the above amendments and following remarks is respectfully requested.

Statement of Common Ownership

Applicants respectfully submit that the Brittain reference (now US 6,794,869) and Applicants' invention were, at the time of Applicants' invention was made, owned by General Electric Company.

Claims allowable over the applied art

The rejection of Claims 9-15, 17-26 and 32-39 under 35 USC §103 (a) over Brittain (US patent application publication 2002/0140423) in view of Pelc et al. (US Patent 6,445,181) is respectfully traversed. Applicants respectfully submit that the Brittain reference should be disqualified as prior art pursuant to 35 USC §103 (c) since the Brittain reference (now US 6,794,869) and Applicants' invention were, at the time of Applicants' invention was made, owned by General Electric Company. Therefore the rejection under 35 USC 103(a) over the Brittain and Pelc references is obviated. Withdrawal of the rejection is respectfully requested.

The rejection of Claims 9-15, 17-26 and 32-39 over Hajnal (US Patent 6,385,478) in view of Pelc et al. (US Patent 6,445,181) is respectfully traversed. The present invention, as claimed in amended independent Claims 9 and 18 are patentable over the Hajnal reference. Specifically, the present invention claims an imaging method for producing a Magnetic Resonance (MR) image of a subject. The method includes sending a plurality of MR signals to a plurality of receivers, where the receivers are adapted to adjust a receiver parameter. The receiver

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parameter is adjusted based on direction of the image parallel to a motion of the subject. The receive parameters adjusted include a frequency or phase of the receiver or the transmit frequency or a receive frequency of the RF coil (page 8, lines 5-10). The Hajnal reference describes applying excitation pulses to a restricted region of a magnet bore and generating a volumetric image of a greater length than the restricted region. Nowhere does the Hajnal reference teach, suggest or disclose receivers that are adapted to adjust a receiver parameter. The receiver parameter is adjusted based on direction of the image parallel to a motion of the subject. The Hajnal reference merely discloses controlling a velocity of the patient table and not a frequency or phase on the receiver.

The Pelc reference does not overcome the above cited limitations of Hajnal. Pelc discloses means for translating the table through the first volume for imaging a plurality of sub-volumes in the object as the plurality of sub-volumes pass through the first volume, the plurality of receiver coils being translated with the table and detecting MRI signals for a sub-volume at a plurality of times and at a plurality of table positions within the first volume, and the sum of the sub-volumes being larger than the first volume. Nowhere does Pelc teach suggest or disclose detecting a plurality of MR signals using a radio frequency (RF) coil array where the receivers are adapted to adjust a receiver parameter based on direction of the image parallel to a motion of the subject as described in claims 9 and 18.

Thus, no reasonable combination Hajnal and Pelc would obtain Applicants' recited invention of an imaging method comprising detecting MR signals using a plurality of receivers configured to adjust a receiver parameter based on direction of the image parallel to a motion of the subject as described in claims 9 and 18.

Further there is no motivation in Hajnal to combine it with Pelc. Hajnal describes a method and system to generate volumetric images of greater length than a restricted region and Pelc discloses a method for acquiring image data for an imaging field of view larger than a magnetic field. Therefore, Hajnal (either alone or in combination with Pelc) does not disclose, teach or suggest disclose applicant's invention as cited in claims 9 and 18.

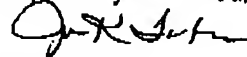
In view of the foregoing amendment and for the reasons set out above, Applicants respectfully submit that the application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are respectfully requested.

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Should the Examiner believe that anything further is needed to place the application in condition for allowance, the Examiner is requested to contact Applicants' undersigned representative at the telephone number below.

Respectfully submitted,



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